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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/607,966

06/27/2003

Rotem Cooper

030292

3059

7590
QUALCOMM Incorporated
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07/18/2007

EXAMINER

KARIKARI, KWASI

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/607,966

Applicant(s)

COOPER ET AL.

Examiner

Kwasi Karikari

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>04/01/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 04/01/2005 is in compliance with the provision of 37 CFR 1.97, has been considered by the Examiner, and made of record in the application file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-7, 12-19 and 22-24 are rejected under U.S.C. 102(e) as being anticipated by Narasimha (U.S 20040160918 A1), (hereinafter Narasimha).

Regarding claims 1,5,17 and 19, Narasimha discloses an apparatus/method (= mobile terminal 100, see Par. 0022 and Fig. 1) in a code division multiple access (CDMA) communication network, comprising:

a message processor operative to process a first signaling message received from a base station in the CDMA network (= broadcast of system information; and system information is available to mobile station 100, see Par. 0031); and

a controller (= controller 170) operative to obtain a network operator identifier from the first signaling message, search a preferred roaming list for an entry with the network operator identifier (= mobile scan for available channel; and determines if the SID and /or NID of the system is listed on the PRL, see Pars. 0031-32), and provide an indication of whether or not the CDMA network is accessible based on result of the search (= mobile station 100 remains on the most preferred channel, once a channel in the most preferred system is acquired, see Par. 0032) wherein the network operator identifier distinctly identifies a network operator of the CDMA network (see Par. 0023)

Regarding claims 2, 6 and 18, as recited in claims 1, 5 and 17, Narasimha discloses the apparatus, wherein the message processor is further operative to process a second signaling message received from the base station, and wherein the controller is further operative to extract a system identification (SID) value and a network identification (NID) value from the second signaling message and compare the extracted SID and NID values against SID and NID values stored in the preferred roaming list (= broadcast of system information; system information is available to mobile station 100; and determining if SID and/or NID is the PRL, see Pars. 0023 and 0031-32).

Regarding claims 3 and 7, as recited in claims 2 and 6, Narasimha discloses the apparatus, wherein the controller is operative to obtain the network operator identifier and search the preferred roaming list only if the extracted SID and NID values do not

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match the SID and NID values stored in the preferred roaming list (see Pars. 0031-32).

Regarding claim 4 and 12, as recited in claims 1 and 5, Narasimha discloses the apparatus, wherein, to search for the network operator identifier in the preferred roaming list, the controller is operative to encode the network operator identifier into a system identification (SID) value and a network identification (NID) value and compare the encoded SID and NID values against SID and NID values stored in the preferred roaming list (= broadcast of system information; system information is available to mobile station 100; and determining if SID and/or NID is the PRL, see Pars. 0023 and 0031-32).

Regarding claims 13-15 as recited in claim 12, Narasimha discloses SID (see Pars. 0031-32) but does not disclose expressly, the method, wherein the encoded SID value falls within a range (26,112 to 31,1003 and 31,100 or 31,101) of values excluded from assignment to network operators for system identification.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to incorporate a SID value that falls within a range (26,112 to 31,1003 and 31,100 or 31,101) of values excluded from assignment to network operators for system identification.

Applicant has not disclosed that a SID value that falls within a range (26,112 to 31,1003 and 31,100 or 31,101) of values provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would

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have expected Applicant's invention to perform equally well with the broadcasted information (SID) that is made available from the system (see Par. 0031-32).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate a SID value as disclosed in Narasimha to obtain the invention as specified in claims 13-15.

Regarding claims 16, as recited in claim 5, Narasimha discloses the method, wherein the network operator identifier indicates that the CDMA network is accessible and located in a foreign country with respect to a home network (see Pars. 0023 and 0031-32).

Regarding claims 22 and 24, Narasimha discloses an apparatus/method (= mobile terminal 100, see Par. 0022 and Fig. 1) in a code division multiple access (CDMA) communication network, comprising:

a message processor operative to process at least one signaling message received from a base station in the CDMA network (= broadcast of system information; and system information is available to mobile station 100, see Par. 0031);

a controller (= controller 170) operative to obtain a set of records for a preferred roaming list from the at least one signaling message, wherein at least one record in the set of records has a system identification (SID) value that is in a set of SID values used to indicate network operator identifiers (= mobile scan for available channel; and determines if the SID and /or NID of the system is listed on the PRL, see Pars. 0031-32)

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and wherein each of the at least one record includes a network operator identifier that distinctly identifies a network operator of a CDMA network (see Par. 0031); and

a memory unit operative to store the set of records for the preferred roaming list (= broadcast of system information; and system information is available to mobile station 100, see Pars. 0031-32).

Regarding claim 23 as recited in claim 22, Narasimha discloses SID (see Pars. 0031-32) but does not disclose expressly, the method, wherein the set of SID values used to indicate network operator identifiers is within a range of 26,112 to 31,103.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to incorporate a SID value that falls within a range (26,112 to 31,1003). Applicant has not disclosed that a SID value that falls within a range (26,112 to 31,1003) of values provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the broadcasted information (SID) that is made available from the system (see Par. 0031-32).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate a SID value as disclosed in Narasimha to obtain the invention as specified in claim 23.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 8 and 9 are rejected under U.S.C. 103(a) as being unpatentable over Narasimha in view of Le et al., (U.S 6,556,820) (hereinafter, Lee).

Regarding claim 8, as recited in claim 5, Narasimha fails to specifically to disclose the method, wherein the network operator identifier comprises a mobile country code (MCC) and a network operator code (NOC).

However, Le teaches the method, wherein the network operator identifier comprises a mobile country code (MCC) and a network operator code (NOC) (see col. 8, lines 11-21).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Le with the system of Narasimha for the benefit of achieving a mobility management system that provides support for multiple subscriptions and

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achieves very high efficiency of signaling procedures over the air interface (see Le; col. 4, lines 50-63).

Regarding claim 9, as recited in claim 8, Narasimha fails to specifically to disclose the method, wherein the network operator code is a mobile network code (MNC).

However, Le teaches the method, wherein the network operator code is a mobile network code (MNC) (see col. 8, lines 11-21).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Le with the system of Narasimha for the benefit of achieving a mobility management system that provides support for multiple subscriptions and achieves very high efficiency of signaling procedures over the air interface (see Le; col. 4, lines 50-63).

4. Claims 10,11,20,21 and 25-28 are rejected under U.S.C. 103(a) as being unpatentable over Narasimha in view of Kransmo et al., (U.S 20030016639) (hereinafter, Kransmo).

Regarding claim 10, as recited in claim 5, Narasimha fails to specifically to disclose the method, wherein the first signaling message is a System Parameters Message or an Extended System Parameters Message defined by IS-2000, and wherein the network operator identifier is sent in an MCC field and an IMSI 11 12 field of the System Parameters Message or the Extended System Parameters Message.

However, Kransmo teaches the method, wherein the first signaling message is a System Parameters Message or an Extended System Parameters Message defined by IS-2000, and wherein the network operator identifier is sent in an MCC field and an IMSI 11 12 field of the System Parameters Message or the Extended System Parameters Message (= IMSI is used for signal purposes within cdma 2000 network and consists of MCC and MNC, see Par. 0031).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Kransmo with the system of Narasimha for the benefit of achieving a system that minimize signaling and improve battery life for MS (see Kransmo; Par. 0011).

Regarding claim 11, as recited in claim 5, Narasimha fails to specifically to disclose the method, wherein the network operator identifier comprises a 3-digit mobile country code (MCC) and a 3-digit mobile network code (MNC), and wherein two most significant digits of the MNC are sent in the IMSI 11 12 field of the System Parameters Message or the Extended System Parameters Message.

However, Kransmo teaches the method, wherein the network operator identifier comprises a 3-digit mobile country code (MCC) and a 3-digit mobile network code (MNC), and wherein two most significant digits of the MNC are sent in the IMSI 11 12 field of the System Parameters Message or the Extended System Parameters Message (= IMSI is used for signal purposes within cdma 2000 network and consists of MCC and MNC, see Par. 0031).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Kransmo with the system of Narasimha for the benefit of achieving a system that minimize signaling and improve battery life for MS (see Kransmo; Par. 0011).

Regarding claims 20 and 25, Narasimha discloses a method of performing system selection in a code division multiple access (CDMA) communication network, comprising:

processing a System Parameters Message or an Extended System Parameters Message received from a base station in the CDMA network (= broadcast of system information; and system information is available to mobile station 100, see Par. 0031); identification (SID) value and a network identification (NID) value (see Par. 0032);

comparing the encoded SID and NID values against SID and NID values stored in a preferred roaming list (= mobile scan for available channel; and determines if the SID and /or NID of the system is listed on the PRL, see Pars. 0031-32); and

providing an indication of whether or not the CDMA network is accessible based on result of the searching (= mobile station 100 remains on the most preferred channel, once a channel in the most preferred system is acquired, see Par. 0032); but fails to teach obtaining a mobile country code (MCC) value and a network operator code (NOC) value from an MCC field and an IMSI 11 12 field, respectively, of the System Parameters Message or the Extended System Parameters Message, wherein the MCC and NOC values form a network operator identifier that distinctly identifies a network

operator of the CDMA network; encoding the MCC and NOC values into a system.

However, Kransmo teaches "obtaining a mobile country code (MCC) value and a network operator code (NOC) value from an MCC field and an IMSI 11 12 field, respectively, of the System Parameters Message or the Extended System Parameters Message, wherein the MCC and NOC values form a network operator identifier that distinctly identifies a network operator of the CDMA network; encoding the MCC and NOC values into a system(= IMSI is used for signal purposes within cdma 2000 network and consists of MCC and MNC, see Par. 0031).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Kransmo with the system of Narasimha for the benefit of achieving a system that minimize signaling and improve battery life for MS (see Kransmo; Par. 0011).

Regarding claim 21, as recited in claim 20 Narasimha further discloses that the method, further comprising: extracting a SID value and a NID value from a Sync Channel Message or the System Parameters Message received from the base station; comparing the extracted SID and NID values against the SID and NID values stored in the preferred roaming list; and performing the obtaining, encoding, comparing, and providing only if the extracted SID and NID values do not match the SID and NID values stored in the preferred roaming list (see Pars. 0031-33).

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Regarding claim 26, as recited in claim 25, Narasimha fails to disclose that the apparatus, wherein the network operator code is a mobile network code (MNC).

However, Kransmo teaches that the network operator code is a mobile network code (MNC) (= IMSI is used for signal purposes within cdma 2000 network and consists of MCC and MNC, see Par. 0031).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Kransmo with the system of Narasimha for the benefit of achieving a system that minimize signaling and improve battery life for MS (see Kransmo; Par. 0011).

Regarding claims 27 and 28, Narasimha discloses a method/apparatus of transmitting a network operator identifier in a code division multiple access (CDMA) communication network, comprising:

processing the System Parameters Message or the Extended System Parameters Message for transmission over a wireless link (= broadcast of system information; and system information is available to mobile station 100, see Par. 0031); but fails specifically to disclose "mapping a mobile country code (MCC) value for the network operator identifier to an MCC field of a System Parameters Message or an Extended System Parameters Message; mapping a network operator code (NOC) value for the network operator identifier to an IMSI 11 12 field of the System Parameters Message or the Extended System Parameters Message, wherein the network operator identifier distinctly identifies a network operator of the CDMA network."

However, Kransmo teaches that the mapping a mobile country code (MCC) value for the network operator identifier to an MCC field of a System Parameters Message or an Extended System Parameters Message; mapping a network operator code (NOC) value for the network operator identifier to an IMSI 11 12 field of the System Parameters Message or the Extended System Parameters Message, wherein the network operator identifier distinctly identifies a network operator of the CDMA network (= IMSI is used for signal purposes within cdma 2000 network and consists of MCC and MNC, see Par. 0031).

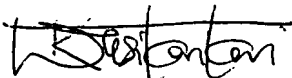
It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Kransmo with the system of Narasimha for the benefit of achieving a system that minimize signaling and improve battery life for MS (see Kransmo; Par. 0011).

Conclusion

5. **Examiner's Note:** Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwasi Karikari whose telephone number is 571-272-8566. The examiner can normally be reached on M-F (8 am - 4pm). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Rafael Pérez-Gutiérrez* can be reached on 571-272-7915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8566. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kwasi Karikari
Patent Examiner.
07/03/2007



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